Interdisciplinary Masters' Program in Information Security
Department of Communication Requirements

In addition to the courses listed in the requirement areas, the various departments and programs occasionally offer new courses and courses on specific topics that may meet area requirements, especially when they are taught by CERIAS principals and fellows. These include TECH 621 (when taught by Prof. Dark), CNIT 623 and 499 (Prof. Taylor), CNIT 581, LING 689 (Prof. Raskin), some CS 590 offerings, and others. The INSC program administration will announce such courses when they are available, but students are welcome to ask about any courses that might not be otherwise listed.

Area A. Core Courses (6)
--- CS 52600 Information Security or CNIT 55500 Advanced Network Security
--- CS 55500 Cryptography
--- PHIL 52400 or PHIL 62400† Contemporary Ethical Theory or Seminar in Ethics
--- May substitute PHIL 411 or PHIL 424 if PHIL 52400 is not offered in a year
--- POL 62000† Proseminar in Public Policy or --- TECH 62100 Tech & Policy
--- COM 69800 Research MA or MS Thesis (for the thesis option only)

**PHIL 58000 is no longer available, but if you have already taken PHIL 58000, it will be recognized as meeting your requirements.

Area B. Recommended Courses (3)
One of the following courses:
COM 51800 Theories Of Persuasion
COM 55800 Historical Trends In Mass Communication Research
COM 55900 Current Trends In Mass Communication Research
COM 57400 Organizational Communication
COM 59000† Directed Study Of Special Problems
COM 63200† Special Topics In Mass Communication

Any two of the following courses:
-- SFS Students must take Applied Research Problems in National Information Security TECH 58100
AGEC 60800 Benefit-Cost Analysis
69100† Research in Agricultural Economics
CNIT 42100 Small Scale Digital Device Forensics
45500 Network Security
46500 Wireless Network Security & Management
49900† Topics in Computer and Info Technology
51100 Foundations in Homeland Security
51200 Managing Resources and Applications for Homeland Security
55600 Basic Computer Forensics
55700 Advanced Cyber forensics
55800 Bioinformatics Computing And Systems Integration
58100† Workshop in Computer Technology
File Systems Forensics
Intro Assistive Tech & Robotics
Mobile & Embedded Device Forensics
The Internet of Things
Natural Language Technologies
Prob in Natl Info Security
62300† Contemporary Computer Technology Problem
Applied Statistics in IT
52300 Research Methods for Computing
CS 50300 Operating Systems
52700 Software Security
52800 Network Security
53600§ Data Communication and Computer Networks
56500 Programming Languages
58000 Algorithm Design, Analysis, and Implementation
59000† Independent Study/Variable Topics
Advanced Machine Learning
Computer Aided Program Reasoning
Network & Matrix Computations
Security Analytics
62600 Advanced Information Assurance
63600 Internetworking
65500 Advanced Cryptology
EDPS 53300 Intro to Educational Research I: Methodology
69500 Adv Topics in Engineering Education
IE 53000 Quality Control
53200 Reliability
57700§ Human Factors in Engineering
65900 Human Aspects of Computing
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<tr>
<th>Course Code</th>
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<tr>
<td>67400</td>
<td>Computer And Communication Methods For Production Control</td>
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<tr>
<td>53000</td>
<td>Biometric Technology Test Design, Performance, and Evaluation</td>
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<tr>
<td>54000</td>
<td>Biometric Performance and Usability Analysis</td>
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<td>54500</td>
<td>Biometrics Technology And Applications</td>
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<td>58100†</td>
<td>Biometric Data Analysis</td>
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<td>68900</td>
<td>Seminar in Linguistics</td>
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<td>Natr1 Language Process</td>
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<td>54700§</td>
<td>Computer Communication Systems</td>
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<td>68400</td>
<td>Information Security for Managers</td>
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<td>68100</td>
<td>Managing Behavior in Organization</td>
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<td>68300</td>
<td>Individual Behavior in Organizations</td>
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<td>PHIL 52400*</td>
<td>Contemporary Ethical Theory</td>
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<td>62400†</td>
<td>Seminar in Ethics</td>
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<td>52000†</td>
<td>Proseminar Public Policy</td>
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<td>57700§</td>
<td>Human Factors in Engineering</td>
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<td>50200</td>
<td>Experimental Statistics II</td>
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<td>51200</td>
<td>Applied Regression Analysis</td>
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<td>51300</td>
<td>Statistical Quality Control</td>
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<td>51400</td>
<td>Design of Experiments</td>
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<td>51700</td>
<td>Statistical Inference</td>
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<tr>
<td>TECH 58100†</td>
<td>Workshop in Technology</td>
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<td>62100†</td>
<td>Seminar in Technology</td>
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### Area C. Elective Courses (one of the following)

*Any of the following variable topic courses, presuming instructor consent is obtained:*

- **COM 61000†** Seminar: Special Topics In Rhetorical Studies
- **COM 61200** Seminar: Special Topics In Interpersonal Com
- **COM 61800** Seminar: Special Topics In Persuasion Theory
- **COM 67400†** Seminar: Special Topics In Organizational Com
- **COM 67600†** Seminar: Special Topics In Health Com
- **CNIT 58100†** Workshop in Computer Technology
- **26300†** Contemporary Computer Technology Problems
- **COM 59000†** Directed Study of Special Problems
  - Communication Theory
  - Communication & Pedagogy
  - Foundations Of Human Communication Inquiry I
  - Foundations Of Human Communication Inquiry II
- **CS 50200** Compiling and Programming Systems
- **54100** Database Systems
- **54200** Distributed Database Systems
- **57300** Data Mining
- **54400** Digital Communications
- **56200** Introduction to Data Management
- **56500** Computer Architecture
- **57000** Artificial Intelligence
- **57300** Compilers And Translator Writing Systems
- **ECET 58100†** Workshop in Elect. And Comp. Engineering Tech
- **FNR 55800** Digital Remote Sensing and GIS
- **LING 50000** Introduction to Linguistics
- **53100** Semantics I: Lexical And Sentential Semantics
- **53200** Semantics II: Formal and Grammatical Semanatics
- **53050** Management Accounting II
- **50600** Auditing
- **54400** Database Mangement Systems
- **54500** Systems Development
- **56100** Logistics
- **59000†** Directed Readings In Management
- **53200** Accounting for Managers
- **50600** Auditing
- **63000** Legal and Social Foundations of Management
- **68300** Princ of Info Systems
- **64200** Comp And Reward Syst I
- **64300** Comp And Reward Sys II
- **OBHR 58500†** Seminar in Mathematical Statistics

Courses from at least three different graduate programs should be taken between Areas B and C. Other courses, often under variable numbers and offered on a one-time or occasional basis, may be of interest. Students are encouraged to bring those courses to the attention of their advisors, who may recommend these to other students and approve the substitution of these courses for some courses listed above.

Under the thesis option, the master's thesis must be completed and defended in an oral examination administered by the Advisory Committee. Under the examination option, a 3-hour written examination is administered by the student's Advisory Committee. This option is rarely employed and only in unusual circumstances.

§ Note: May take one or the other of the following but not both:

- CS 53600 or MGMT 54700
- PSY 57700 or IE 57700

**Note that COM 59000F and 59000G as well as COM 60000 and 60100 are restricted to only COM Ph.D. students.**

* unless taken under Area A

† When content is appropriate
€ not offered in recent years due to staff shortages.